

Amarillo Pale Ale

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **25**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (84.2%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (10.5%) | 85 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 0.25 kg (5.3%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Galena | 16 g | 60 min | 12 % |
| Aroma (end of boil) | Amarillo | 25 g | 5 min | 9.5 % |
| Aroma (end of boil) | Amarillo | 50 g | 0 min | 9.5 % |
| Dry Hop | Amarillo | 55 g | 3 day(s) | 9.5 % |